



Geel 2000 Language Schools

Math Department

First Term

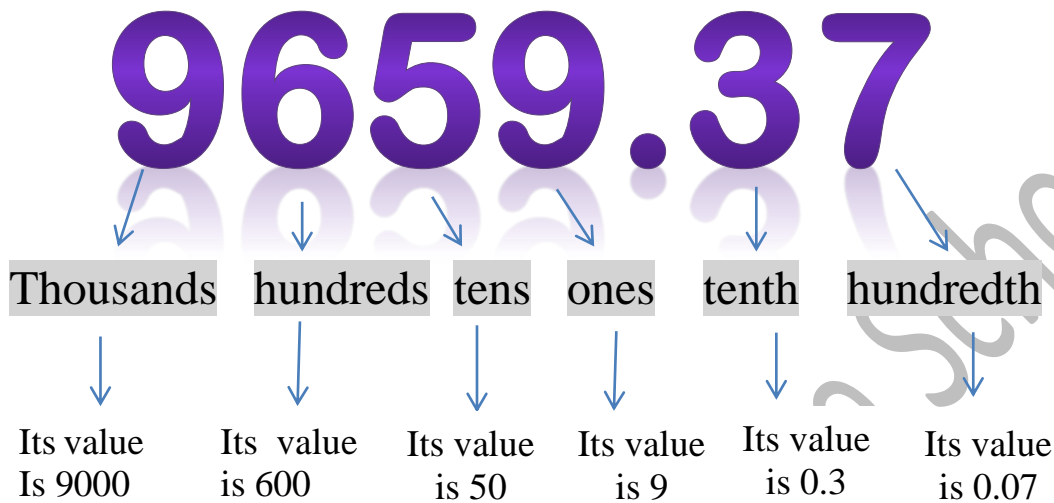
Primary 5

2022 /2023

Unit 1

Lesson 1 : the journey begins

The value and the place value of decimals:



You can use the large place-value chart to help you read and write decimals as follows :

milliards		millions			thousands			ones			.	Decimals	
O		H	T	O	H	T	O	H	T	O	.	tenths	hundredths
							9	6	5	9	.	3	7

Standard form : 9,659.37

Word form : nine thousand, six hundred fifty nine and thirty seven hundredth

Unit form : 9 thousands, 6hundreds, 5 tens, 9 ones, 3 tenth, 7 hundredth

Practice

Ex1 : Write each of the following in decimal form :

- 1) 83 hundredths
- 2) 3 hundredths
- 3) 4 and 4 hundredths
- 4) 1 and 5 tenths
- 5) 40 and 50 hundredths

Ex2 : write each of the following in word form :

- 1) 906.32
- 2) 8708.8
- 3) 2.33
- 4) 89.76
- 5) 8745.05

Ex3 : complete :

- 1) in 452.18 the digit 8 is in the place, its value is.....
 - 2) in 1,897.98 the digit 7 is in the Place, its value is
 - 3) in 734.28 the digit 8 is the place, its value is
 - 4) in 452.09 the digit 5 in the place, its value is
 - 5) in 9,924.56 the digit 5 in the place, its value is
-

Lesson 2 : Decimal to the thousandths place

Ex1 : Write each of the following in decimal form :

- 1) 97 hundredths
- 2) 3 thousandths
- 3) 4 and 43 hundredths
- 4) 1 and 5 thousandths
- 5) 40 and 50 thousandths

Ex2 : write each of the following in word form :

- 1) 57.123
- 2) 8.008
- 3) 188.133
- 4) 89.706
- 5) 5.105

Ex3 : complete :

- 1) in 987.075 the digit 5 is in the place, its value is.....
- 2) in 1,897.743 the digit 4 is in the Place, its value is
- 3) in 734.208 the digit 0 is the place, its value is
- 4) in 452.019 the digit 4 in the place, its value is
- 5) in 4.206 the digit 2 in the place, its value is

Lesson 3 : place value shuffle

Ex1 : Use the place value chart to solve the following

Ex1 : $12.5 \times 100 = \dots\dots\dots$

thousands	Ones			.	Decimals	
O	H	T	O	.	tenths	Hundredths
				.		
				.		

-The value of whole number(increased/decreased)
when multiplying by 100

Ex2 : $17.5 \div 10 = \dots\dots\dots$

thousands	Ones			.	Decimals	
O	H	T	O	.	tenths	Hundredths
				.		
				.		

-The value of whole number(increased/decreased)
when dividing by 10

Lesson 4: composing and decomposing decimals.

Ex1 : Record the number in the place value chart to decompose this number :

- 34.546

Thousands	ones			.	Decimals		
O	H	T	O	.	tenths	Hundredths	Thousands
				.			

.....

Ex2 : Write each of the following in standard form :

1) $7 + 0.3 + 0.04 + 0.009 = \dots\dots\dots$

2) $400 + 4 + 0.04 + 0.004 = \dots\dots\dots$

3) $5,000 + 40 + 9 + 0.2 + 0.007 = \dots\dots\dots$

4) $700 + 0.4 + 0.009 = \dots\dots\dots$

5) $70 + 8 + 0.6 + 0.007 = \dots\dots\dots$

6) $0.2 + 0.009 + 10 + 400 = \dots\dots\dots$

7) $300 + 0.1 + 0.03 + 8 = \dots\dots\dots$

8) $70 + 7 + 200 + 0.5 + 0.08 = \dots\dots\dots$

Ex3 : Write the number in standard form :

1) Three and thirty one hundredths .

.....

1) Forty three and seven tenths.

.....

2) Seventy three thousandths.

.....

3) 2 tens , 4 ones , 8 tenths , 9 thousandths .

.....

Ex4 : Complete each of the following :

1) $5.13 = \dots\dots\dots + 0.1 + 0.03$

2) $87.9 = 80 + \dots\dots\dots + 0.9$

3) $\dots\dots\dots = 90 + 6 + 0.6 + 0.01$

4) Fifteen and four tenths = $\dots\dots\dots + \dots\dots\dots + \dots\dots\dots$

5) 254 thousandths = $\dots\dots\dots + \dots\dots\dots + \dots\dots\dots$

6) 92 thousandths = $\dots\dots\dots + \dots\dots\dots$

7) 315 tenths = $30 + \dots\dots\dots + \dots\dots\dots$

8) Six and twelve hundredths = $6 + \dots\dots\dots + \dots\dots\dots$

Lesson 5 : Comparing Decimals.

Ex1: compare the numbers using (>,<or =):

1) $1.002 \dots\dots\dots \frac{1002}{1000}$

2) $6.308 \dots\dots\dots 6+0.3+0.008$

3) $9+0.008 \dots\dots\dots 9+0.1+0.001$

4) $54.88 \dots\dots\dots 54 \frac{88}{1000}$

5) 2 ones, 3 tenths, 4 thousandths $\dots\dots\dots 2.34$

6) $8.004 \dots\dots\dots 4 \text{ ones, } 8 \text{ thousandths}$

Ex2 : Order from least to greatest :

1) 2.836 , 2.648 , 2.692 , 2.868

.....

2) 80.21 , 80.012 , 8.102 , 8.012 , 80.09

.....

3) 67.98 , 67.89 , 670.099 , 76.098.

.....

4) 4.89 , 48.9 , 40.08 , 40.18 , 40.81

.....

5) 679.147 , 678.147 , 678.174 , 678.109

.....

lesson 6 : Rounding Decimals

Ex1 : write each of the following to the nearest whole number :

- 1) $0.8 \simeq \dots\dots\dots$
- 2) $9.7 \simeq \dots\dots\dots$
- 3) $23.4 \simeq \dots\dots\dots$
- 4) $1.25 \simeq \dots\dots\dots$
- 5) $82.71 \simeq \dots\dots\dots$

EX 2 : write each of the following to the nearest tenths:

- 1) $76.176 \simeq \dots\dots\dots$
- 2) $25.74 \simeq \dots\dots\dots$
- 3) $152.19 \simeq \dots\dots\dots$
- 4) $34.820 \simeq \dots\dots\dots$
- 5) $91.99 \simeq \dots\dots\dots$

EX 3 : write each of the following to the nearest thousands:

- 1) $3.0708 \simeq \dots\dots\dots$
 - 2) $0.0764 \simeq \dots\dots\dots$
 - 3) $99.9996 \simeq \dots\dots\dots$
 - 4) $0.0004 \simeq \dots\dots\dots$
 - 5) $8.0098 \simeq \dots\dots\dots$
-

Lesson 7 : Estimating decimal sums

Ex1: Solve all the following and estimate:

1) $4.632 + 8.071 = \dots\dots\dots$

Estimate $\dots\dots\dots$

2) $3.51 + 1.13 = \dots\dots\dots$

Estimate $\dots\dots\dots$

3) $12.67 + 3.16 = \dots\dots\dots$

Estimate $\dots\dots\dots$

4) $1.291 + 9.12 = \dots\dots\dots$

Estimate $\dots\dots\dots$

5) $5.87 + 8.13 = \dots\dots\dots$

Estimate $\dots\dots\dots$

Ex2 : sayed wanted to ride his bike 60 km this week ,by Thursday he had ridden 51.99 km ,on Friday he rode 8.01 km . estimate to see if he has met his goal ?

$\dots\dots\dots$
 $\dots\dots\dots$
 $\dots\dots\dots$

Lesson 8 : modeling decimal addition

Ex1: find the sum :

1) $0.14 + 0.24 = \dots\dots\dots$

2) $0.07 + 0.12 = \dots\dots\dots$

3) $0.94 + 0.31 = \dots\dots\dots$

4) $0.06 + 0.06 = \dots\dots\dots$

5) $0.54 + 0.61 = \dots\dots\dots$

6) $0.03 + 0.17 = \dots\dots\dots$

7) $0.17 + 0.12 = \dots\dots\dots$

8) $0.82 + 0.13 = \dots\dots\dots$

9) $1.7 + 0.23 = \dots\dots\dots$

10) $5.33 + 3.44 = \dots\dots\dots$

lesson 9 : Thinking like mathematician

Ex1: Evaluate each sum and identify each digits place value :

1) $2 \text{ thousandths} + 4 \text{ thousandths} = \dots \text{thousandths}$

Place valuehundredths.....thousandths

2) $5 \text{ thousandths} + 8 \text{ thousandths} = \dots \text{thousandths}$

Place valuehundredths.....thousandths

3) $13 \text{ thousandths} + 54 \text{ thousandths} = \dots \text{thousandths}$

Place valuehundredths.....thousandths

4) $21 \text{ thousandths} + 43 \text{ thousandths} = \dots \text{thousandths}$

Place valuehundredths.....thousandths

5) $56 \text{ thousandths} + 49 \text{ thousandths} = \dots \text{thousandths}$

Place valuehundredths.....thousandths

lesson 10 : subtracting decimals:

Ex1: Evaluate Each of the following :

1) $0.98 - 0.87 = \dots\dots\dots$

2) $8.16 - 0.04 = \dots\dots\dots$

3) $0.76 - 0.58 = \dots\dots\dots$

4) $4.79 - 2.39 = \dots\dots\dots$

5) $9.129 - 3.111 = \dots\dots\dots$

6) $6.852 - 0.19 = \dots\dots\dots$

7) $7.6 - 2.2 = \dots\dots\dots$

8) $87.29 - 5.06 = \dots\dots\dots$

9) $76.88 - 8.16 = \dots\dots\dots$

10) $82.87 - 9.54 = \dots\dots\dots$

Lesson 11 : Estimating decimal differences:

Ex1: Solve all the following and estimate:

1) $8.76 - 2.16 = \dots\dots\dots$

Estimate $\dots\dots\dots$

2) $3.61 - 1.13 = \dots\dots\dots$

Estimate $\dots\dots\dots$

3) $12.67 - 3.33 = \dots\dots\dots$

Estimate $\dots\dots\dots$

4) $15.14 - 9.12 = \dots\dots\dots$

Estimate $\dots\dots\dots$

5) $9.87 - 8.13 = \dots\dots\dots$

Estimate $\dots\dots\dots$

6) $52.61 - 13.12 = \dots\dots\dots$

Estimate $\dots\dots\dots$

7) $83.77 - 8.63 = \dots\dots\dots$

Estimate $\dots\dots\dots$

Lesson 12 : subtracting to the thousandths place

Ex1: Evaluate each difference and identify each digits place value :

6) $25 \text{ thousandths} - 14 \text{ thousandths} = \dots \text{thousandths}$

Place valuehundredths.....thousandths

7) $58 \text{ thousandths} - 8 \text{ thousandths} = \dots \text{thousandths}$

Place valuehundredths.....thousandths

8) $95 \text{ thousandths} - 54 \text{ thousandths} = \dots \text{thousandths}$

Place valuehundredths.....thousandths

9) $67 \text{ thousandths} - 43 \text{ thousandths} = \dots \text{thousandths}$

Place valuehundredths.....thousandths

10) $96 \text{ thousandths} - 49 \text{ thousandths} = \dots \text{thousandths}$

Place valuehundredths.....thousandths

Lesson 13: decimals story problems:

Ex1 : the width of tahya masr bridge ,which connects northern and eastern cairo to western cairo across the nile river is 67.3 m and jiaxing-shaoxing sea bridge in japan is less in width than the tahya masr bridge by 11.7 m . how wide is jiaxing-shaoxing sea bridge ?

.....

.....

.....

.....

.....

.....

Ex2 : Amr and his father went fishing .each of them caught against fish , the mass of the first fish was 53.25 kg ,and the mass of the other fish reached 48.8 kg what is the mass of the two fish together ?

.....

.....

.....

.....

.....

Unit 2

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Lesson 1: Expression, Equations and Variables:

- Remember:-

- **Variable:** It's a letter or symbol that represents the value in an equation.

For ex: X, Y, Z

- **Expression:** It's a set of a fixed number and variables that line up next to each other.

For ex: $X+5, 3xy$

- **Equation:** It's mathematical sentence that includes an equal relationship between two mathematical expression.

For ex: $5+X=9, Y= 5 \times 3$

Practice:

Ex1: Select any of the following sentences is

“Equation”, “Mathematical Expression” or

“other”:

1- $3.8 + 4.7 = M$ (.....)

2- $4.7 + 8.9$ (.....)

3- $3.6 + N$ (.....)

4- $3.5 + 2.4 = 2.5 + 3.4$ (.....)

5- Amir had 3.5kg of apples.(.....)

6- $7 + y$ (.....)

Ex2:Read the following story problems. Make an equation for each problem:

- 1- Nour had 25.15 pounds, and she bought a toy for 14.5 pounds.

How many pounds does Nour have left?

.....

- 2- A farm had 4,200 chickens. 3,350 chickens were sold in a week.

How many chickens are left on the farm?

.....

- 3- If you know that the sum of the height of two trees together is 46 meters and the height of one of them is 18.25 meters, find the unknown height.

.....

Lesson 2: Variables in Equations

Ex: Find the value of the variable:

1- $9 - x = 3.5$

$x = \dots\dots\dots$

2- $8.23 + a = 10.24$

$a = \dots\dots\dots$

3- $12 + x = 15$

$x = \dots\dots\dots$

4- $7 \times 14 = y$

$y = \dots\dots\dots$

5- $n - 12.40 = 3.01$

$n = \dots\dots\dots$

Lesson 3: Finding the unknown

Ex1: Find the value of the variable:

1) $7.521 + x = 12.131$

$x = \dots\dots\dots$

2) $t - 2.445 = 0.26$

$t = \dots\dots\dots$

3) $6.82 - h = 1.023$

$h = \dots\dots\dots$

4) $34.750 - s = 15.25$

$s = \dots\dots\dots$

5) $55.05 + x = 99.15$

$x = \dots\dots\dots$

Ex2: Find the missing number:

(1) $18.551 - k = 7.308$

Bar model

Solution

(2) $b - 4.863 = 6.350$

Bar model

Solution

$$(3) L + 3.247 = 5.489$$

Bar model

Solution

$$(4) 34.750 - s = 15.25$$

Bar model

Solution

Lesson 4: Telling stories with numbers

- (1) If the sum of what Hamza and Ziad is 361.05 pounds, and Ziad has only 159.85 pounds, then how many Hamza has?

.....
.....

- (2) Write a story problem representing each equation, and then solve it:

a) $Z + 4.04 = 8.3$

.....
.....
.....
.....

b) $P - 7.825 = 5.66$

.....

.....

.....

.....

.....

c) $9.53 + c = 12.53$

.....

.....

.....

.....

.....

Lesson 5 (finding factors)

1) Circle the Number which has Factor:

❶ Is Factor 2?

40, 43, 28, 54, 65, 30

❷ Is 5 Factor?

60, 35, 70, 53, 40, 56

❸ Is Factor 4?

40, 35, 16, 70, 24

2) List All of The Factors of:

15

= ×
= ×
= ×
= ×

Factors are

20

= ×
= ×
= ×
= ×

Factors are

40

= ×
= ×
= ×
= ×

Factors are

24

= ×
= ×
= ×
= ×

Factors are

16

= ×

= ×

= ×

= ×

Factors are

35

= ×

= ×

= ×

= ×

Factors are

36

= ×

= ×

= ×

= ×

Factors are

42

= ×

= ×

= ×

= ×

Factors are

3) Fill in the missing factors by the variables:

$$8 \times m = 16$$

$$V \times 15 = 45$$

$$7 \times t = 56$$

$$P \times 8 = 72$$

$$m = \dots\dots\dots$$

$$v = \dots\dots\dots$$

$$t = \dots\dots\dots$$

$$p = \dots\dots\dots$$

Lesson 6 (Prime factorization)

1) Find the factors and determine prime or not prime

$$21 = \dots \times \dots$$

$$= \dots \times \dots$$

Factors are

21 is

$$7 = \dots \times \dots$$

Factors are

7 is

$$10 = \dots \times \dots$$

$$= \dots \times \dots$$

Factors are

10 is

12

$$12 = \dots \times \dots$$

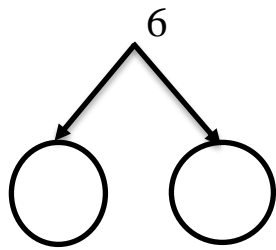
$$= \dots \times \dots$$

$$= \dots \times \dots$$

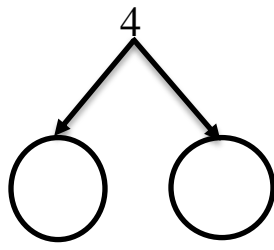
Factors are

12 is

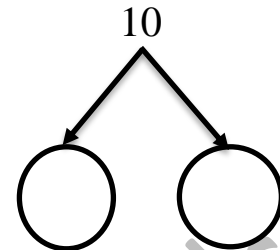
4)Factorize to prime factors using factor tree :



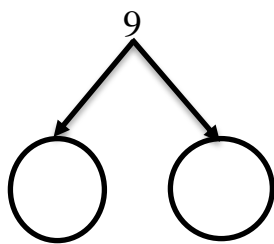
$$6 = \dots \times \dots$$



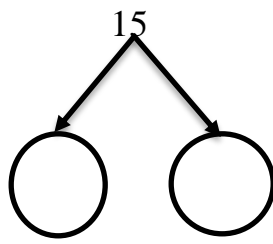
$$4 = \dots \times \dots$$



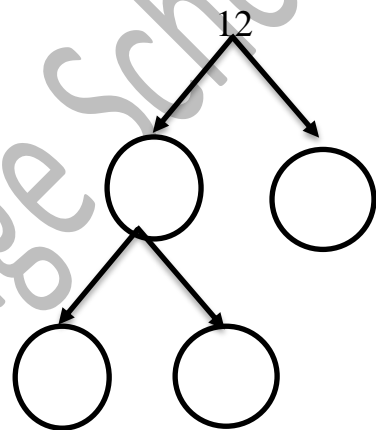
$$10 = \dots \times \dots$$



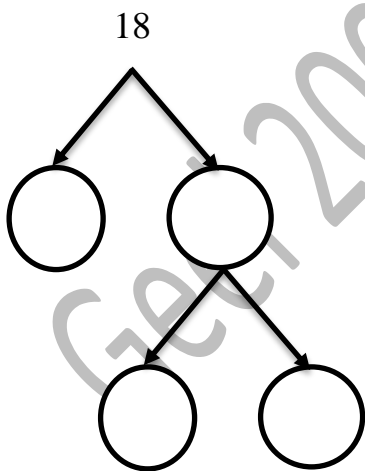
$$9 = \dots \times \dots$$



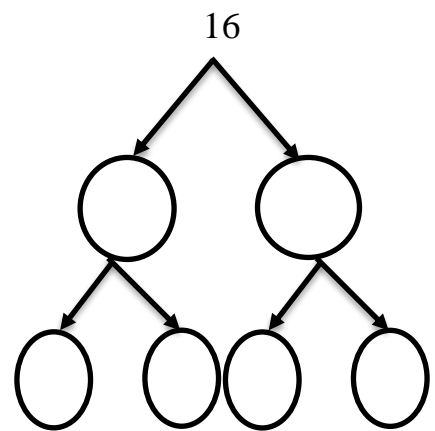
$$15 = \dots \times \dots$$



$$12 = \dots \times \dots \times \dots$$



$$18 = \dots \times \dots \times \dots$$



$$16 = \dots \times \dots \times \dots \times \dots$$

Lesson 7 (Greatest common Factors)

1) Find the GCF for each of the following :

a) 28 and 42

28 =

42 =

GCF =

b) 16 and 32

16 =

32 =

GCF =

c) 18 and 27

18 =

27 =

GCF =

d) 12 and 20

12 =

20 =

GCF =

e) 30 and 45

30 =

45 =

GCF =

f) 48 and 72

48 =

72 =

GCF =

Lesson 8 (identifying multiples)

1)complete :

a) List the first five multiple of 7

.....

b) List the first six multiple of 5

.....

c) List the first ten multiple of 3

.....

d) List the first eight multiple of 10

.....

e) List the first twelve multiple of 4

.....

f) List the first nine multiple of 6

.....

2)Underline multiples of 2 :

17 , 5 , 26 , 4 , 13 , 2 , 20

3)Underline multiples of 2 :

4 , 15 , 21 , 3 , 10 , 12 , 22

4)Underline multiples of 5 :

20 , 8 , 5 , 51 , 40 , 15 , 23

Lesson 9 (Least Common Multiple)

1) Find the LCM of the following :

a) 6 and 9

6 =

9 =

LCM =

b) 12 and 9

12 =

9 =

LCM =

c) 10 and 15

10 =

15 =

LCM =

d) 4 and 8

4 =

8 =

LCM =

Lesson 10 (Factors or Multiple)

1) Find GCF and LCM :

a) 12 and 9

12 =

9 =

GCF =

LCM =

b) 8 and 4

8 =

4 =

GCF =

LCM =

Choose :

1) The smallest prime number is

a) 1

b) 2

c) 3

d) 5

2) The common factor for all numbers is

a) 1

b) 2

c) 3

d) 5

3) The numbers 3 and 5 factors of

a) 10

b) 12

c) 15

d) 20

4) The G.C.F of (8 , 4)

a) 2

b) 4

c) 5

d) 8

Unit 3

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Lesson 1 (the power of ten)

EX1: Solve all the following:

1) $90 \times 10 = \dots\dots\dots$

2) $5 \times 10,000 = \dots\dots\dots$

3) $1,000 \times 60 = \dots\dots\dots$

4) $10 \times 10,000 = \dots\dots\dots$

5) $32 \times 100 = \dots\dots\dots$

EX2: find the missing:

1) $9 \times \dots\dots\dots = 9,000$

2) $1,000 \times 8 = \dots\dots\dots$

3) $3 \times \dots\dots\dots = 300,000$

4) $\dots\dots\dots \times 12 = 1,200$

5) $\dots\dots\dots \times 10 = 130$

Lesson 2 (using the area model to multiply)

Ex1 : solve the following using area model :

1) $321 \times 21 = \dots\dots\dots$



2) $615 \times 43 = \dots\dots\dots$



3) $207 \times 13 = \dots\dots\dots$



4) $310 \times 66 = \dots\dots\dots$



Lesson 3 (distributive property of multiplication)

Ex1 : complete each of the following :

1) 36×14

$$= (10 \times \dots) + (10 \times 6) + (4 \times 30) + (4 \times \dots)$$

$$= \dots + \dots + \dots + \dots$$

$$= \dots$$

2) 45×16

$$= (10 \times \dots) + (10 \times 5) + (6 \times 40) + (6 \times \dots)$$

$$= \dots + \dots + \dots + \dots$$

$$= \dots$$

3) 213×12

$$= (10 \times 200) + (10 \times \dots) + (10 \times 3) + (2 \times \dots) + (2 \times 10) + (2 \times \dots)$$

$$= \dots + \dots + \dots + \dots + \dots + \dots$$

$$= \dots$$

4) $(30 \times 30) + (30 \times 5) + (9 \times 30) + (9 \times 5) = \dots$

30	900	
9		45

Lesson 4 (using the partial product model to multiply)

Ex1: solve each of the following using the partial product strategy :

1) 35

$$\begin{array}{r} \times 13 \\ \hline \end{array}$$

$$(10 \times 30) = \dots\dots\dots$$

$$(10 \times 5) = \dots\dots\dots$$

$$(3 \times 30) = \dots\dots\dots$$

$$(3 \times 5) = \dots\dots\dots = \dots\dots\dots$$

2) 115

$$\begin{array}{r} \times 53 \\ \hline \end{array}$$

$$(50 \times 100) = \dots\dots\dots$$

$$(50 \times 10) = \dots\dots\dots$$

$$(50 \times 5) = \dots\dots\dots$$

$$(3 \times 100) = \dots\dots\dots$$

$$(3 \times 10) = \dots\dots\dots$$

$$(3 \times 5) = \dots\dots\dots = \dots\dots\dots$$

Lesson5 :(what is the algorithm)

Ex1 : solve the following :

1) 78

 × 23

.....

.....

.....

2) 86

 × 17

.....

.....

.....

lesson 6 (multiplying multi-digit numbers)

Ex1 : solve the following :

1) 2378

 × 21

.....

.....

.....

2) 8601

 × 27

.....

.....

.....

Lesson7(multiplication problems in the real numbers)

Ex1 : Amr ate 2 pieces of pizza each day ,the price of each piece is 7 L.E . how much money will he pay after 120 days ?

.....

.....

.....

.....

.....

Ex2 : Alaa sells 12 pies each day ,she sells each pie for 5 L.E . how much money she will gain after 150 days ?

.....

.....

.....

.....

Unit 4

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Lesson 1 :

Understanding Division

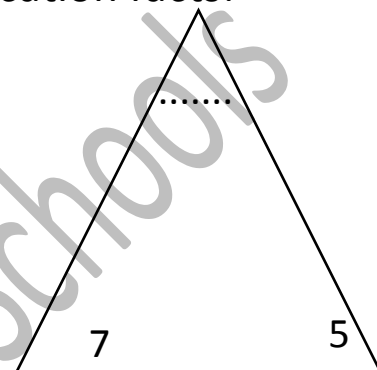
1) Complete the triangle of division and multiplication facts:

a) \times=.....

..... \times=.....

..... \div=.....

..... \div=.....

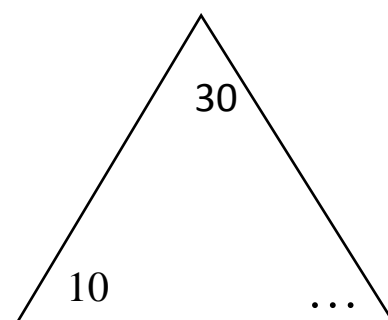


b) \times=.....

..... \times=.....

..... \div=.....

..... \div=.....



2) Complete and Find the Quotient:

a) $8 \div 8 = \dots\dots\dots$

b) $630 \div 7 = \dots\dots\dots$

c) $804 \div 4 = \dots\dots\dots$

d) $6482 \div 2 = \dots\dots\dots$

e) $7070 \div 7 = \dots\dots\dots$

f) $8044 \div 4 = \dots\dots\dots$

3) Abeer wants to buy books for L.E 69 .if the cost of one book is L.E
3.How many books can she buy ?

The number of the books that
she can buy=.....=.....books.

Lesson 2 :

Using the Area model to Divide

Using the area model to divide :

1) $2,613 \div 12 = \dots\dots\dots$

--	--	--

2) $2,501 \div 28 = \dots\dots\dots$

--	--

3) $6,813 \div 12 = \dots\dots\dots$

--	--	--

4) $7,236 \div 35 = \dots\dots\dots$

--	--	--

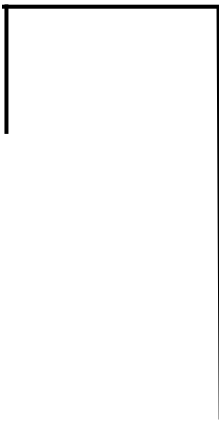
Lesson 3

Using the Partial Quotients model to Divide

➤ Using the partial quotients strategy to solve the problems:

1)

$$1536 \div 14 = \dots\dots\dots$$



2)

$$6315 \div 19 = \dots\dots\dots$$



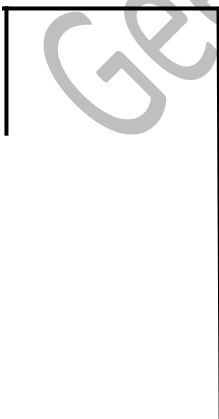
3)

$$4608 \div 23 = \dots\dots\dots$$



4)

$$937 \div 4 = \dots\dots\dots$$



5)

$$9248 \div 4 = \dots\dots\dots$$



6)

$$6278 \div 3 = \dots\dots\dots$$



Lesson 4

Estimating Quotients

Estimate the solution of each problem and use the appropriate strategy to solve:

1) $1,892 \div 67 = \dots\dots\dots$

Estimation: $\dots\dots\dots$

Solution: $\dots\dots\dots$

2) $75,612 \div 56 = \dots\dots\dots$

Estimation: $\dots\dots\dots$

Solution: $\dots\dots\dots$

3) $8,127 \div 36 = \dots\dots\dots$

Estimation: $\dots\dots\dots$

Solution: $\dots\dots\dots$

4) $7,177 \div 25 = \dots\dots\dots$

Estimation: $\dots\dots\dots$

Solution: $\dots\dots\dots$

Lesson 5

Using the Standard Algorithm to Divide

$65 \div 15 =$	$97 \div 44 =$
$456 \div 63 =$	$837 \div 56 =$
$8,457 \div 32 =$	$9,807 \div 13 =$

Lesson 6

Checking Division with multiplication

Solve the problem then check it with multiplication:

1) $4,523 \div 14 = \dots\dots\dots$

.....

.....

.....

.....

2) $2,984 \div 26 = \dots\dots\dots$

.....

.....

.....

.....

3) $4256 \div 77 = \dots\dots\dots$

.....

.....

.....

.....

4) $4824 \div 8 = \dots\dots\dots$

.....

.....

.....

.....

Lesson 7

Multistep story problems

solve :

1) A baker made 480 serving of basbosa for a party . if each baking tray holds 14 servings of basbosa , how many trays will be needed to hold all the basbosa ?

.....

.....

.....

.....

2) Mom baked a batch of 215 balah el sham . two balah el sham fell on the floor leaving 10 on the platter , if 13 kids split

The remaining balah el sham equally , how many balah el sham will each child get ?

.....

.....

.....

.....

3) There were 29 girls and 47 boys in a class . the teacher asked them to work in groups of 12. How many groups were there ?

.....

.....

.....

.....

Unit 5

multiplication and division with decimals

Concept 1 : multiplying decimals

Lesson 1 : multiplying by power of ten

Complete

- 1) $3 \times 3\text{tens} = \dots\dots\dots$
- 2) $4 \times 0.002 = \dots\dots\dots$
- 3) $12 \times 0.1 = \dots\dots\dots$
- 4) $9 \times 0.01 = \dots\dots\dots$
- 5) $42 \times 0.01 = \dots\dots\dots$
- 6) $54 \times 0.001 = \dots\dots\dots$
- 7) $15 \times 0.1 = \dots\dots\dots$
- 8) $16.3 \times 10 = \dots\dots\dots$
- 9) $17.2 \times 100 = \dots\dots\dots$
- 10) $47.5 \times 10 = \dots\dots\dots$
- 11) $3.245 \times 100 = \dots\dots\dots$
- 12) $125.1 \times 0.01 = \dots\dots\dots$
- 13) $205 \times 0.01 = \dots\dots\dots$

X	8	80	800
0.001			
0.01			
0.1			
1			
10			
100			

Lesson 2 : multiplying decimals by whole numbers.

Complete:

1) $2.4 \times 5 = \dots\dots\dots$

2) $0.32 \times 4 = \dots\dots\dots$

3) $4.02 \times 6 = \dots\dots\dots$

4) $3.16 \times 4 = \dots\dots\dots$

5) $2.35 \times 3 = \dots\dots\dots$

6) $0.234 \times 7 = \dots\dots\dots$

7) $2.56 \times 23 = \dots\dots\dots$

8) $1.7 \times 43 = \dots\dots\dots$

9) $1.37 \times 4.5 = \dots\dots\dots$

10) $3.51 \times 21 = \dots\dots\dots$

Lesson 3 : multiplying tenths by tenths

Complete:

1) $0.2 \times 0.2 = \dots\dots\dots$

2) $0.3 \times 0.3 = \dots\dots\dots$

3) $0.2 \times 0.4 = \dots\dots\dots$

4) $0.5 \times 0.5 = \dots\dots\dots$

5) $0.6 \times 0.7 = \dots\dots\dots$

6) $1.2 \times 0.3 = \dots\dots\dots$

7) $1.3 \times 0.4 = \dots\dots\dots$

8) $1.2 \times 0.5 = \dots\dots\dots$

9) $4.2 \times 0.7 = \dots\dots\dots$

10) $3.5 \times 0.2 = \dots\dots\dots$

Lesson 4 : estimating decimal products.

Complete as an example:

- 1) $24.7 \times 1.9 =$ Estimate : $25 \times 2 = 50$
- 2) $3.5 \times 11.5 =$ Estimate : \times =
- 3) $99.6 \times 15.3 =$ Estimate : \times =
- 4) $24.3 \times 5.4 =$ Estimate : \times =
- 5) $249.6 \times 0.5 =$ Estimate : \times =

Food item	Actual cost L.E	Rounded cost L.E	Quantity	Equation	Running total estimated cost L.E
Milk	8.3	.....	10	.....	.....
Rice	15.3	.....	20	.....	.....
Appels	18.5	.....	20	.....	.....
Oranges	9.3	.....	30	.....	.....
Onions	5.7	.....	30	.....	.....
Chicken	44.4	.....	5	.....	.....

Lesson 5: Using the area model to multiply decimal.

Complete

1) $70 \times 2 = \dots\dots\dots$	2) $90 \times 2 = \dots\dots\dots$
$7 \times 20 = \dots\dots\dots$	$9 \times 20 = \dots\dots\dots$
$7 \times 2 = \dots\dots\dots$	$9 \times 2 = \dots\dots\dots$
$0.7 \times 2 = \dots\dots\dots$	$0.9 \times 2 = \dots\dots\dots$
$7 \times 0.2 = \dots\dots\dots$	$9 \times 0.2 = \dots\dots\dots$
$0.7 \times 0.2 = \dots\dots\dots$	$0.9 \times 0.2 = \dots\dots\dots$
$0.07 \times 0.2 = \dots\dots\dots$	$0.09 \times 0.2 = \dots\dots\dots$
$0.7 \times 0.02 = \dots\dots\dots$	$0.9 \times 0.02 = \dots\dots\dots$
$0.07 \times 0.02 = \dots\dots\dots$	$0.09 \times 0.02 = \dots\dots\dots$

Decimal area model

1) $1.2 \times 2.4 = \dots\dots\dots$

2) $32.1 \times 0.26 = \dots\dots\dots$

3) $2.3 \times 4.2 = \dots\dots\dots$

4) $8.2 \times 0.16 = \dots\dots\dots$

5) $2.15 \times 0.35 = \dots\dots\dots$

6) $16.3 \times 2.6 = \dots\dots\dots$

Lesson 6 : multiplying decimals through the hundredths place.

Find by using the standard algorithm.

1) 49.35 X 3.4 _____	2) 15.4 X 2.3 _____	3) 2.25 X 2.6 _____
4) 27.34 X 2.5 _____	5) 9.37 X 0.15 _____	6) 7.65 X 24 _____
7) 10.32 X 0.62 _____	8) 25.3 X 7.2 _____	9) 82.5 X 1.5 _____

Lesson 7 : multiplying decimals through the thousandths place.

1) 7.102 X 0.15 _____	2) 6.137 X 2.5 _____	3) 2.421 X 1.5 _____
4) 9.124 X 3.6 _____	5) 7.178 X 20 _____	6) 8.257 X 1.2 _____
7) 2.423 X 2.7 _____	8) 3.271 X 3.1 _____	9) 60.15 X 1.3 _____

Lesson 8 : Decimals and the metric system.

Choose the correct answer

1) $12,430 \text{ g} = \dots\dots\dots \text{ kg}$

- a) 1.043 b) 102.4 c) 12.34 d) 124.3

2) $5,267 \text{ mL} = \dots\dots\dots \text{ L}$

- a) 0.527 b) 5.267 c) 52.67 d) 526.7

3) $25 \text{ cm} = \dots\dots\dots \text{ m}$

- a) 0.25 b) 2.5 c) 0.205 d) 0.025

4) $0.4 \text{ m} = \dots\dots\dots \text{ cm}$

- a) 400 b) 40 c) 0.04 d) 0.004

5) $17.6 \text{ kg} = \dots\dots\dots \text{ g}$

- a) 1.76 b) 17600 c) 1760 d) 0.176

6) $72 \text{ mm} = \dots\dots\dots \text{ cm}$

- a) 7.2 b) 0.72 c) 0.072 d) 720

7) $5.9 \text{ L} = \dots\dots\dots \text{ mL}$

- a) 5.09 b) 5900 c) 0.59 d) 0.059

Lesson 9 : Measurment , decimals , and power of ten.

Complete

1) $0.004 \text{ kg} = \dots\dots\dots \text{ g}$

$0.004 \times 1000 = \dots\dots\dots$

2) $54 \text{ mm} = \dots\dots\dots \text{ cm}$

$54 \div 10 = \dots\dots\dots$

3) $9 \text{ cm} = \dots\dots\dots \text{ m}$

$9 \times 0.01 = 9 \times \frac{1}{100} = \dots\dots\dots$

4) $400 \text{ mL} = \dots\dots\dots \text{ L}$

5) $400 \div \dots\dots\dots = \dots\dots\dots$

6) $900 \text{ m} = \dots\dots\dots \text{ km}$

$900 \div \dots\dots\dots = \dots\dots\dots$

Lesson 10 : solving multistep story problems.

- 1) Ali made a liter of sugar cane juice , he drank 420 mL , his father drank 0.25 L , How much sugar cane juice is remaining ?

.....

.....

.....

.....

.....

- 2) Fatema wants to know how she has grown this year . In January she was 148 cm , by the end of the year she was 1.6 meters tall . How much did Fatema grow this year.

.....

.....

.....

- 3) Samar twin sister Noor also wants to know how much she grew . In January , she was 1.25 meters , at the end of the year , she was 134 centimeters .Who grew more Samar or Noor ?

How much more?

.....

.....

.....

.....

.....

Unit (5) concept 2

Lesson (11) Dividing by Powers of Ten.

Ex. Complete :

$$1- 600 \div 100 = \dots\dots\dots$$

$$3- 45 \div 10 = \dots\dots\dots$$

$$600 \div 10 = \dots\dots\dots$$

$$4- 5.9 \div 0.1 = \dots\dots\dots$$

$$600 \div 1 = \dots\dots\dots$$

$$5- 5.9 \div 100 = \dots\dots\dots$$

$$600 \div 0.1 = \dots\dots\dots$$

$$6- 6.17 \div 0.01 = \dots\dots\dots$$

$$600 \div 0.01 = \dots\dots\dots$$

$$7- 82 \div 1,000 = \dots\dots\dots$$

$$2- 5,400 \div 1,000 = \dots\dots\dots$$

$$8- 14.7 \div 0.01 = \dots\dots\dots$$

$$5,400 \div 100 = \dots\dots\dots$$

$$5,400 \div 10 = \dots\dots\dots$$

$$5,400 \div 1 = \dots\dots\dots$$

$$5,400 \div 0.01 = \dots\dots\dots$$

Lesson (12) Patterns and Relationships in powers

of ten.

Ex: complete

1- $810.04 \div 0.001 = \dots\dots\dots$ $810.04 \times 0.001 = \dots\dots\dots$

2- $810.04 \div 0.01 = \dots\dots\dots$ $810.04 \times 0.01 = \dots\dots\dots$

3- $810.04 \div 0.1 = \dots\dots\dots$ $810.04 \times 0.1 = \dots\dots\dots$

4- $810.04 \div 10 = \dots\dots\dots$ $810.04 \times 10 = \dots\dots\dots$

5- $810.04 \div 100 = \dots\dots\dots$ $810.04 \times 100 = \dots\dots\dots$

Ex: Complete

1. $14.6 \times \dots\dots = 146$ $14.6 \mid \dots\dots = 146$

2. $234.23 \times \dots\dots = 2.3423$ $234.23 \mid \dots\dots = 2.3423$

3. $7.202 \times \dots\dots = 720.2$ $7.202 \mid \dots\dots = 720.2$

4. $78 \times \dots\dots = 7,800$ $78 \mid \dots\dots = 7,800$

5. $0.35 \times \dots\dots = 0.035$ $0.35 \mid \dots\dots = 0.035$

Ex: Complete

1. $810 \text{ mL} = \dots\dots\dots \text{ L}$

$$810 \times \dots\dots = \dots\dots$$

$$810 \div \dots\dots\dots = \dots\dots$$

2. $35 \text{ m} = \dots\dots\dots \text{ cm}$

$$35 \times \dots\dots\dots = \dots\dots$$

$$35 \div \dots\dots\dots = \dots\dots$$

3. $500 \text{ g} = \dots\dots\dots \text{ Kg}$

$$500 \times \dots\dots\dots = \dots\dots\dots$$

$$500 \div \dots\dots\dots = \dots\dots\dots$$

4. $6,300 \text{ mm} = \dots\dots\dots \text{ M}$

$$6,300 \times \dots\dots\dots = \dots\dots\dots$$

$$6,300 \div \dots\dots\dots = \dots\dots\dots$$

Lesson (13) Modeling Decimal Division

Ex: Use your Base 10 blocks to model the problem. Write the quotient for each division.

1. $3.5 \div 0.5 = \dots\dots\dots$

2. $5.7 \div 4 = \dots\dots\dots$

3. $3 \div 0.6 = \dots\dots\dots$

4. $9.2 \div 1.3 = \dots\dots\dots$

5. $7.6 \div 4 = \dots\dots\dots$

6. $9 \div 5 = \dots\dots\dots$

LESSON (14) Estimating Decimal Quotients

Ex.

Estimate the quotient for each expression by rounding the divisor and dividend to the nearest compatible whole numbers.

1. $38.27 \div 2.78$

My Estimate:

2. $5.65 \overline{) 44.12}$

My Estimate:

3. $8.25 \overline{) 10.18}$

My Estimate:

4. $25.15 \div 4.2$

My Estimate:

5. $19.62 \overline{) 82.21}$

My Estimate:

6. $24 \overline{) 634.7}$

My Estimate:

Lessons 15 :deviding decimals by whole numbers

Ex1 : solve all the following using standard algorithm

:

1) $\begin{array}{r} 16 \overline{) 62.24} \end{array}$

2) $\begin{array}{r} 5 \overline{) 51.65} \end{array}$

3) $\begin{array}{r} 30 \overline{) 589.5} \end{array}$

Lesson 16 : dividing decimals by decimals

Ex1 : solve all the following using standard algorithm
:

1) $\overline{0.05 \over 44}$ estimate :
Quotient :

2) $\overline{0.05 \over 0.91}$ estimate :
Quotient :

3) $\overline{0.04 \over 0.51}$ estimate :
Quotient :

Lesson 17 : solving challenging multistep story problem :

1) Adel is having a sale at his sweets shop. one chocolate candy is 2.45 L.E, he will provide 1 free candies for every 10 bought . a customer wants to buy 100 candies for an event .how much will the customer spend ?

.....
.....
.....

2)Wael is filling identical vases with water for flower arrangements at the florist he pours 16liters and 250 millimeters equally into 22 vases . when he is finished , mady still has 0.85 L of water left .

How much water is in each vase ? give your answer in liters

.....
.....
.....

Unit 6

Geel/2000 Lalla Rookh Schools

Lesson 1 : numerical expressions :

Ex 1 : complete each of the following :

1) $57.8 - \dots\dots\dots = 32.4$

.....

2) $124.6 + \dots\dots\dots = 235.8$

.....

3) $\dots\dots\dots \div 5.2 = 2.3$

.....

4) $34.2 \times 1.1 = \dots\dots\dots$

.....

5) $13.5 + 2.2 \times 7.1 = \dots\dots\dots$

.....

6) $89.2 - 19.2 \times 2.1 = \dots\dots\dots$

.....

7) $2.1 \times 1.1 + 0.3 = \dots\dots\dots$

.....

8) $3.5 - 2.5 \times 9.4 =$

.....

Lesson 2 : Numerical Expressions with grouping symbols

Ex1 : solve All the following :

1) $56.18 + 43 \times 0.02 + 15 \div 0.1 = \dots\dots\dots$

.....

.....

.....

2) $7 \times (8.1 + 6.4 \div 2) = \dots\dots\dots$

.....

.....

.....

3) $67.13 + (12.02 \div 2 + 20.13 - 9.1) = \dots\dots\dots$

.....

.....

.....

4) $(30 \times 2.5 + 47.18 - 3.12) \div 0.1 = \dots\dots\dots$

.....

.....

.....

Lesson 3 : placing grouping symbols:

Ex1 : place grouping symbols to generate the given value :

1)The value is 20 $3+2 \times 4$

2)The value is 16 $8+ 4 \times 2$

3)The value is 18 $4 \times 5 + 6 - 8$

4)The value is 50.2 $5 \times 11 - 5 + 0.2$

5)The value is 35 $7 \times 8 - 3$

6)The value is 236.4 $23.62 \times 10 + 0.4 \div 2$

7)The value is 42.35 $3.8 \times 9.5 + 6.25$

8)The value is 13 $2 \times 18 \div 9 + 9$

Lesson 4 : Writing Expressions to represent scenarios

Ex1 :write expression :

1)Subtract 5.2 from 9.22 then, multiply the result by 2

.....
.....

2)Divide 93 by 0.3 and then add 114.7 after, divide the result by 5

.....
.....

3)Multiply 4.3 by 100 .next , subtract 45.8 .then , add 12.4 last, divide the result by 0.1

.....
.....

4)By the difference between 10 and 9.27 multiply by the sum of 54 and 46 then, divide 1,168 by the result

.....
.....

Lesson 6 : creating numerical pattern :

1)complete :

a) 52 , 46 , 40 ,,.....,.....

Rule :

b) 21 , 25 , 29 ,,.....,.....

Rule :

c) 85 , 80 , 75 ,,.....,.....

Rule :

d)

input	output
4	24
6	A.....
7	42
B.....	48
9	C.....

Rule

e)

Input	output
10	6
12	7
A.....	8
16	9

Rule

2) Create the pattern :

a) Starting number 1

Rule : $n+4$

.....,

b) Starting number 3

Rule : $n \times 2 - 1.5$

.....,

c) Starting number 5.25

Rule : $n \div 0.5$

.....,

d) Starting number : 11

Rule : $(n+3) \times 10$

.....,

Lesson 7 :Solving problems with Numerical patterns

1)Complete

a)

Stage	Number of balls
1	1
2	5
3	14
4	A.....
5	B.....

b) When shams was 6 years old , Her brother Tamer was Half her age . How old will tamer be when shams is 62years old

.....

complete the Table to show shams and tamers ages :

Shams age	Tamer age
15	A.....
17	B.....
C.....	16
22	D.....
E.....	21

C) A seamstress is making dresses . she noticed the amount of fabric she used to make 3 dresses and to make 5 dresses .

Use the pattern to complete the table :

Number of dresses	Fabric needed (M)
1	A.....
2	B.....
3	7.5
4	C.....
5	12.5

How much fabric will the seamstress need to make 7 dresses ?

.....

How many dresses can the seamstress make with 42.5 meters of fabric ?

.....